



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
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APPLICATION NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO.
08/838,910	4-11-97		

EXAMINER

ART UNIT

PAPER NUMBER

1744

25

DATE MAILED:

INTERVIEW SUMMARY

All participants (applicant, applicant's representative, PTO personnel):

(1) Mr. D. Taylor (3)

(2) Tung (4)

Date of Interview: 2-11-99

Type: Telephonic Personal (copy is given to applicant applicant's representative).

Exhibit shown or demonstration conducted: Yes No If yes, brief description:

Agreement was reached. was not reached.

Claim(s) discussed:

Identification of prior art discussed:

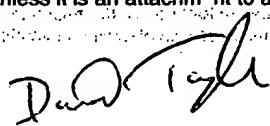
Description of the general nature of what was agreed to if an agreement was reached, or any other comments: Mr. Taylor argued that the 10% porosity of the inner electrode coating is not conventional. Prior art would have that porosity at less than 10% to protect against silicon gas poisoning. Examiner asked for proof in the way of a publication or other documentation to verify that assertion. Claims 21-26, 31, 36 may be allowable if such proof were made. Section 112 rejections were also discussed.

(A fuller description, if necessary, and a copy of the amendments, if available, which the examiner agreed would render the claims allowable must be attached. Also, where no copy of the amendments which would render the claims allowable is available, a summary thereof must be attached.) Proposed amendment will be entered.

- It is not necessary for applicant to provide a separate record of the substance of the interview.
- Since the Examiner's interview summary above (including any attachments) reflects a complete response to each of the objections, rejections and requirements that may be present in the last Office action, and since the claims are now allowable, this completed form is considered to fulfill the response requirements of the last Office action. Applicant is not relieved from providing a separate record of the interview unless box 1 above is also checked.

Examiner Note: You must sign this form unless it is an attachment to another form.

FORM PTOL-413 (REV.1-96)



T. TUNG

PRIMARY PATENT EXAMINER

ART UNIT 112 1744

Manual of Patent Examining Procedure, Section 713.04 Substance of Interview must Be Made of Record.

A complete written statement as to the substance of any face-to-face or telephone interview with regard to an application must be made of record in the application, whether or not an agreement with the examiner was reached at the interview.

§1.133 Interviews

(b) In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for response to Office action as specified in §§ 1.111, 1.135. (35 U.S.C.132)

§ 1.2. Business to be transacted in writing. All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete a two-sheet carbon interleaf Interview Summary Form for each interview held after January 1, 1978 where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks in neat handwritten form using a ball point pen. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below.

The Interview Summary Form shall be given an appropriate paper number, placed in the right hand portion of the file, and listed on the "Contents" list on the file wrapper. The docket and serial register cards need not be updated to reflect interviews. In a personal interview, the duplicate copy of the Form is removed and given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephonic interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the telephonic interview rather than with the next official communication.

The Form provides for recordation of the following information:

- Serial Number of the application
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (personal or telephonic)
- Name of participant(s) (applicant, attorney or agent, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the claims discussed
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). (Agreements as to allowability are tentative and do not restrict further action by the examiner to the contrary.)
- The signature of the examiner who conducted the interview
- Names of other Patent and Trademark Office personnel present.

The Form also contains a statement reminding the applicant of his responsibility to record the substance of the interview.

It is desirable that the examiner orally remind the applicant of his obligation to record the substance of the interview in each case unless both applicant and examiner agree that the examiner will record same. Where the examiner agrees to record the substance of the interview, or when it is adequately recorded on the Form or in an attachment to the Form, the examiner should check a box at the bottom of the Form informing the applicant that he need not supplement the Form by submitting a separate record of the substance of the interview.

It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner, to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:

- 1) A brief description of the nature of any exhibit shown or any demonstration conducted,
- 2) an identification of the claims discussed;
- 3) an identification of specific prior art discussed;
- 4) an identification of the principal proposed amendments of a substantive nature discussed; unless these are already described on the Interview Summary Form completed by the examiner,
- 5) a brief identification of the general thrust of the principal arguments presented to the examiner. The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he feels were or might be persuasive to the examiner,
- 6) a general indication of any other pertinent matters discussed, and
- 7) if appropriate, the general results or outcome of the interview, unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete or accurate, the examiner will give the applicant one month from the date of the notifying letter or the remainder of any period for response, whichever is longer, to complete the response and thereby avoid abandonment of the application (37 CFR 1.135(c)).

Examiner to Check for Accuracy

Applicant's summary of what took place at the interview should be carefully checked to determine the accuracy of any argument or statement attributed to the examiner during the interview. If there is an inaccuracy and it bears directly on the question of patentability, it should be pointed out in the next Office letter. If the claims are allowable for other reasons of record, the examiner should send a letter setting forth his or her version of the statement attributed to him. If the record is complete and accurate, the examiner should place the indication "Interview record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

Art Unit: 1102

Claims 21-26, 31, 36 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The expression "said internal electrode has an emissivity less than 0.3" is still seen to be without support in the original disclosure. The fact that an electrode material Pt happens to have an emissivity less than 0.3 is not adequate basis for the teaching that the electrode be of a material with that emissivity. Further, it is not evident whether an emissivity of say 0.01 (which is embraced by applicant's claim language) would be suitable.

Also, it is unclear what support exists in the original disclosure for the expression "said high-emissivity layer has a porosity of more than 10 percent" recited in the last two lines of claims 21 and 36. The only discussion of the porosity of the high-emissivity layer in the specification appears to be in the first paragraph on page 9, which sets forth a porosity of 50 percent. This is insufficient basis for "more than 10%".

Claim 15 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 15, "said material having a high emissivity" is still without antecedent basis in parent claim 12. It is suggested that --internal electrode-- be added before "material, and "having a high emissivity" be cancelled.

Art Unit: 1102

Claims 21-26, 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakurai et al in view of Torisu et al and Pollner et al.

Applicant argues that in Sakurai the internal and external protective layers 4 are presumably the same in material and porosity in as much as there is no disclosure to the contrary. Since an external protective layer can not serve to protect at a porosity greater than 10%, the external protective layer presumably has a porosity of less than 10%. Since the internal and external protective layers are presumably the same as discussed before, the internal protective layer must have a porosity of less than 10%, contrary to applicant's claim language.

This tortuous reasoning is not persuasive. First of all, the presumption that the internal and external protective layers are the same is not considered to be valid. One of ordinary skill in the art is well-aware that they face different environments and may serve different functions. There is no reason to necessarily make both layers the same. Secondly, the assertion that the external protective layer would not function if its porosity exceeds 10% is seen to be without basis. Note that Pollner's external layer 14 can have a porosity of 1-50%. See col. 5, line 32. There is no evidence whatsoever that Pollner's external layer does not serve to protect the external electrode.

Applicant also argues that because the internal and external protective layers face different environments, it would not have been obvious to apply the features of an external layer in Pollner to the internal layer of Sakurai.

This argument is also not persuasive. One of ordinary skill in the art is well-aware that these layers face different environments and serve some different functions. Once a heater is

Art Unit: 1102

present within the sensor, as is the case with Sakurai, one of ordinary skill in the art would know that the internal layer must be capable of transmitting heat efficiently so as not to thwart the purpose of the heater.

Claims 21-26, 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Torisu et al in view of Skurai et al, Maurer et al or Ker et al and Pollner et al.

Applicant argues that because the internal and external protective layers face different environments, it would not have been obvious to apply the teaching of the external layer of Pollner to the internal layer of Sakurai or Torisu.

This argument has been made in the previous rejection and is similarly non-persuasive here. One of ordinary skill in the art would be well-aware of those differences and adapt the layer structure accordingly. Clearly, the internal layer must not block the efficient transmission of heat to the electrodes and the electrolyte.

Claims 32-35, 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ker et al in view of Agarwal et al.

Applicant argues that Ker does not disclose the problem of heat accumulation and using a heater having a high emissivity to solve it. In Agarwal, because the heater is located around the sensor, there is no heat accumulation problem.

This argument is not persuasive. Agarwal discloses the heater materials used by applicant to be conventional. It would have been obvious for Ker to incorporate conventional heater materials. Whatever benefits are obtained would be inherent of that incorporation.

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THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

The examiner can be reached at 703-308-3329. His supervisor Robert Warden can be reached at 703-308-2920. Any inquiry of a general nature should be directed to the receptionist at 703-308-0661.



Ta Tung

Primary Examiner

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